From: Chan, Suilin
To: "Vincent Esposito"

Cc: Petriman, Viorica; "Richard Rao"; "Cronin, Michael P (DEC)"; Ruvo, Richard; Buettner, Robert; LaVigna, Gaetano;

Villatora, Liliana; "Lieblich, Sam (DEC)"; cicily.nirappel@dec.ny.gov; "Nichols, Caitlyn P (DEC)"; "Watts, Stephen (DEC)"; "John, Thomas (DEC)"; kasi@eespc.com; vinesh@eespc.com; John Claessens; Eric Magidson; Bill Foley;

**Andrew Kane** 

Subject: RE: Starrett City Title V Permit Modification - New Engines - ID# 2-6105-00263/00008 Renewal 3

**Date:** Monday, August 03, 2020 2:27:34 PM

Attachments: Starrett City Power Plant Title V Permit Modification Application - Two New CAT Engines..msq

Terranext Starrett TV Ren 3 Mod 2 New Gen Appl NOI Response Letter 6 13 19.pdf

## Mr. Esposito:

This is in response to your email of July 24, 2020 regarding two new CAT diesel engines Starrett City Power Plant (SCPP) installed at the Spring Creek Towers. In this email, you alluded to a miscommunication regarding SCPP's permitting request. You also claimed that in the letter to EPA dated 6/2/2020, BSC Owner LLC (BSC) indicated that it "has purchased two factory certified Tier-2 engines with post-combustion treatment equipment to reach Tier-4F level emissions from CAT for use as emergency backup for the on-site power plant."

EPA wants to clarify for the record that the letter addressed to me from the BSC Owner LLC (signed by Andrew MacArthur) that was sent via an email on June 2, 2020, by Mr. Richard Rao made no statement about any intention of BSC to use the two modified Tier 2 engines as emergency backup for the on-site power plant. The first attachment to this email includes the BSC letter sent by email on June 2, 2020. On the contrary, SCPP has stated in its title V permit modification application that the two CAT 175-20 model year 2018 diesel engines will be used for non-emergency purposes despite of SCPP's possession of a Tier 2 (and not a Tier 4) certification for these engines. See second attachment to this email: Page 1 of the June 6, 2019 cover letter to the title V application from Richard Rao to Caitlyn P. Nichols and page 3 of the June 13, 2019 Response to NOI from Richard Rao to Caitlyn P. Nichols. The draft title V permit modification issued to SCPP by NYSDEC on October 9, 2019 also included language for non-emergency operation.

Nevertheless, your July 24, 2020 email indicated that BSC now intends to operate the two Tier 2 engines as emergency backup to its onsite power plant for Spring Creek Towers pursuant to 40 CFR Part 60 Subpart IIII, §60.4211(f) and will discuss with NYSDEC a revision to its permit application accordingly. EPA believes this to be the right course of action. To facilitate the permitting process, SPCC/BSC should address the following in its revised title V permit application:

• List on the application, all NSPS 4I and NESHAP 4Z requirements that apply specifically to the 2 new engines. Please be aware that the 2 new engines can no longer be operated for the purposes specified at paragraphs 40 CFR § 60.4211(f)(2)(ii) and (iii). These 2 provisions were vacated by the U.S. Court of Appeals for the District of Columbia Circuit in May 2015.

• A revised applicability determination as to whether the proposed project, which is the addition of the 2 new CAT engines as emergency generators, along with modifications proposed in the 2019 application, would trigger NNSR and/or PSD review;

In addition, the title V permit should include terms and conditions that address the following:

- While the 2 emergency generators are certified to Tier 2 emission standards and can only be operated as such, emission reductions due to the installation of air pollution controls (SCR, Oxidation catalyst, and DP filter) on the engines can be accounted for in the calculation of the engines' PTE. To ensure that the engines continue to emit at the post-control emission levels, the title V permit must include adequate monitoring of relevant parameters of the air pollution controls and periodic performance testing.
- Consistent with SCPP's intention to operate the 2 new Tier 2 certified engines as emergency engines, the title V permit shall include permit conditions that would limit the use of the 2 engines as emergency engines only, in the context of the emergency engines definition at 40 CFR 60.4219 (NSPS 4I). The title V permit shall include all specific NSPS 4I requirements that apply to the 2 new CAT engines as emergency engines. In addition, the title V permit shall also include all specifically applicable requirements from NYSDEC's air regulations that relate to emergency generators.

Furthermore, please note that EPA Region 2 conducted an on-site inspection of the SCPP on July 27, 2020. Our inspectors observed that the two new engines have been installed but have not begun operation. Power to the entire Spring Creek Towers apartment complex is currently provided by two existing turbines and three existing Nordberg engines. One of the Nordberg engines is inoperable, and in need of repair before it can return to service. Given that the existing units have proven to be unreliable in the past few years and the Spring Creek Towers Complex is not connected to the power grid, SCPP is encouraged to devise a plan that would secure reliable power generation capability at the power plant. EPA wants to caution SCPP that black outs or brown outs due to inoperable equipment, such as the Nordberg engine(s), do **not** constitute an emergency situation, as defined in the New Source Performance Standards.

If you have any questions regarding the above, please contact Ms. Viorica Petriman at (212) 637-4021.

Sincerely, Suilin Chan **From:** Vincent Esposito <vesposito@brooksville.com>

**Sent:** Friday, July 24, 2020 1:58 PM **To:** Chan, Suilin < Chan.Suilin@epa.gov>

Cc: Petriman, Viorica <Petriman.Viorica@epa.gov>; 'Richard Rao' <rrao@terranext.net>; 'Cronin, Michael P (DEC)' <michael.cronin@dec.ny.gov>; Ruvo, Richard <Ruvo.Richard@epa.gov>; Buettner, Robert <Buettner.Robert@epa.gov>; LaVigna, Gaetano <LaVigna.Gaetano@epa.gov>; Villatora, Liliana <Villatora.Liliana@epa.gov>; 'Lieblich, Sam (DEC)' <sam.lieblich@dec.ny.gov>; 'cicily.nirappel@dec.ny.gov>; 'Nichols, Caitlyn P (DEC)' <Caitlyn.Nichols@dec.ny.gov>; 'Watts, Stephen (DEC)' <stephen.watts@dec.ny.gov>; 'John, Thomas (DEC)' <thomas.john@dec.ny.gov>; kasi@eespc.com; vinesh@eespc.com; John Claessens <jclaessens@brooksville.com>; Eric Magidson <emagidson@brooksville.com>; Bill Foley <bfoley@brooksville.com>; Andrew Kane <akane@brooksville.com>

**Subject:** RE: Starrett City Title V Permit Modification - New Engines - ID# 2-6105-00263/00008 Renewal 3

Good afternoon Ms. Chan,

Please note that there has been a miscommunication regarding our permitting request. As stated in the letter to EPA dated 6/2/2020, BSC Owner has purchased two factory certified Tier-2 engines with post-combustion treatment equipment to reach Tier-4F level emissions from CAT for use as emergency backup for the on-site power plant.

Spring Creek Towers is an "islanded" facility, meaning there is no connection between the campus and the electrical utility grid. The on-site power plant is the sole source of electricity, heating, cooling, and domestic hot water for the campus, which consists of 46 buildings, shopping center, and 3 NYC public schools. Combined, these facilities serve approximately 20,000 Federally subsidized affordable housing residents.

Spring Creek Towers intends to operate the units purchased as emergency backup to our onsite power plant pursuant to 40 CFR Part 60 Subpart IIII §60.4211(f) and as such will revise the current Title V permit modification to classify the two CAT units as emergency generators.

We ask for your concurrence on this approach. We would welcome any comments or suggestions that you might have in order to ease the way through to permit approval with these changes. We will be discussing this modification with the NYSDEC to revise the permit application and determine the best way forward. Also note that from this point forward, Environmental Engineering Solutions, P.C. will be handling the permitting of these units. Kasi and Vinesh from EES are copied on this message as well, should your team have any questions for them.

Thanks,

Vince Esposito Brooksville 1201 Broadway, Suite 401 New York, NY 10001 C: (914) 621-1754 vesposito@brooksville.com www.brooksville.com

From: Chan, Suilin < Chan.Suilin@epa.gov > Sent: Tuesday, June 16, 2020 10:50 AM
To: 'Richard Rao' < rrao@terranext.net >

**Cc:** Petriman, Viorica <<u>Petriman.Viorica@epa.gov</u>>; Vincent Esposito <<u>vesposito@brooksville.com</u>>; Bill Foley <<u>bfoley@brooksville.com</u>>; 'John, Thomas (DEC)' <<u>thomas.john@dec.ny.gov</u>>; 'Cronin, Michael P (DEC)' <<u>michael.cronin@dec.ny.gov</u>>; Ruvo, Richard <<u>Ruvo.Richard@epa.gov</u>>; Buettner, Robert <<u>Buettner.Robert@epa.gov</u>>; LaVigna, Gaetano <<u>LaVigna.Gaetano@epa.gov</u>>; Villatora, Liliana <<u>Villatora.Liliana@epa.gov</u>>

**Subject:** RE: Starrett City Title V Permit Modification - New Engines - ID# 2-6105-00263/00008 Renewal 3

Mr. Rao:

Please find below the Caterpillar contact we communicated with:

T.J. Tarabulski

Caterpillar Inc.

Marine & Stationary Regulatory Consultant

Mossville, Illinois Phone (309) 578-6587 Cell (309) 360-8382 E-mail: <a href="mailto:tarabulski\_tj@cat.com">tarabulski\_tj@cat.com</a>

Mr. Tarabulski wants us to relay to you that the engine dealer is scheduling a meeting with you and him to discuss those engines.

Suilin Chan

Suilin W. Chan

Chief | Permitting Section | Air and Radiation Division | US EPA Region 2 | Office: (212) 637-4019

From: Richard Rao < rrao@terranext.net > Sent: Monday, June 15, 2020 9:45 AM
To: Chan, Suilin < Chan.Suilin@epa.gov >

**Cc:** Petriman, Viorica < Petriman. Viorica@epa.gov >; 'Vincent Esposito'

<<u>vesposito@brooksvillecompany.com</u>>; 'Bill Foley' <<u>bfoley@brooksvillecompany.com</u>>; 'John,
Thomas (DEC)' <<u>thomas.john@dec.ny.gov</u>>; 'Cronin, Michael P (DEC)' <<u>michael.cronin@dec.ny.gov</u>>;
Ruvo, Richard <<u>Ruvo.Richard@epa.gov</u>>; Buettner, Robert <<u>Buettner.Robert@epa.gov</u>>; LaVigna,
Gaetano <<u>LaVigna.Gaetano@epa.gov</u>>; Villatora, Liliana <<u>Villatora.Liliana@epa.gov</u>>

**Subject:** RE: Starrett City Title V Permit Modification - New Engines - ID# 2-6105-00263/00008 Renewal 3

Renewars

Suilin,

We are in the process of verifying capabilities from Caterpillar based upon our conference call arranged by Guy LaVigna.

In that regard, would you be so kind as to identify the individual in the Caterpillar organization whom EPA interviewed who does not share the view of Foley's letter.

Thank you. Richard Rao

From: Chan, Suilin < Chan.Suilin@epa.gov>
Sent: Tuesday, June 9, 2020 5:05 PM

To: 'Richard Rao' < rrao@terranext.net>

**Cc:** Petriman, Viorica < <a href="mailto:Petriman.Viorica@epa.gov">Petriman, Viorica < <a href="mailto:Petriman.Viorica@epa.gov">Petriman.Viorica@epa.gov</a>>; 'Vincent Esposito'

<vesposito@brooksvillecompany.com>; 'Bill Foley' <bfoley@brooksvillecompany.com>; John,
Thomas (DEC) <thomas.john@dec.ny.gov>; 'Cronin, Michael P (DEC)' <michael.cronin@dec.ny.gov>;
Ruvo, Richard <Ruvo.Richard@epa.gov>; Buettner, Robert <Buettner.Robert@epa.gov>; LaVigna,
Gaetano <LaVigna.Gaetano@epa.gov>; Villatora, Liliana <Villatora.Liliana@epa.gov>

**Subject:** Re: Starrett City Title V Permit Modification - New Engines - ID# 2-6105-00263/00008 Renewal 3

Mr. Rao,

This is in response to your 6/2/2020 email requesting, on behalf of Starrett city, EPA's concurrence that two new Caterpillar (CAT) 4 MW model year 2018 engines, with a displacement of less than 10 liters per cylinder (I/cyl), certified by EPA to the Tier 2 emission standards as emergency engines can be used for non-emergency purposes if retrofitted with emission controls to reduce the emissions to levels equivalent to the Tier 4 emission standards. The EPA **does not** concur with Starrett's request. Pursuant to 40 CFR Part 60 Subpart IIII (NSPS 4I), engines that are EPA certified for emergency applications cannot be used in non-emergency applications. We also disagree with your statement that "[b]ased upon the position of the engine manufacturer, it appears that compliance with your regulation is not possible."

As clearly stated in our 11/7/2019 comments to DEC, NSPS 4I at §60.4204(b) requires owners and operators of 2007 and later model year stationary CI non-emergency engines, such as the 2 proposed new CAT engines, meet the Tier 4 standards in Table 1 of 40 CFR §1039.101. It should be noted 40 CFR §60.4211(c) further requires that compliance with §60.4204(b) be achieved by **purchasing engines certified** to the applicable emission standards in §60.4204(b), as opposed to retrofitting with a control device as being proposed by Starrett City.

Your 2/17/2020 letter to NYSDEC responding to EPA's comments, which included a letter from Foley Power Systems (Foley) was not shared with us until you contacted me on 5/15/2020. Foley clearly states that the engines provided to Starrett City are <u>factory certified EPA Tier 2</u> machines with third-party catalyst systems installed. The letter also stated that "[f]actory

certified Tier-4F generator sets are not currently available from Caterpillar for this size machine..." We note that while the letter states that Caterpillar does not offer 4MW factory certified Tier 4 engines, the letter however doesn't say that it is impossible to certify 4 MW CAT engines to Tier 4. EPA independently contacted Caterpillar regarding the availability of Tier 4 certified engines and was informed that Caterpillar does provide Tier 4 certification up to 3 MW. Also, the Caterpillar representative stated that Caterpillar Inc. does not share the view of Foley's letter which states that since factory certified Tier-4F generator sets are not currently available from Caterpillar (or any other manufacturer) for 4 MW engines, the only way to meet the regulation emissions limits is through the use of third-party equipment.

As my staff has already informed you, EPA issued a letter to engine manufacturers on 12/8/2011 to remind all manufacturers that they are required to certify engines to the applicable emission standards in NSPS 4I, and that engines used for non-emergency purposes must be so certified. The Caterpillar representative that we contacted has acknowledged that EPA's December 2011 letter clearly indicates that emergency engines cannot be used for non-emergency purposes and has asserted that Caterpillar has shared the December 2011 EPA letter with all their product groups and independent vendors/dealers (such as Foley Power Systems). EPA reiterates that NSPS 4I requires engines of model year 2018 certified to Tier 2 standards (for emergency engines) may only be used for emergency purposes. If Starrett City intends to operate the new engines in other than emergency situations, they need to either install engines certified for non-emergency operation or have their modified engines certified as such by Caterpillar.

Being the air permitting authority for Starrett, the NYSDEC has been aware since June 13, 2019 that Starrett requests an air permit for the addition of two new Tier 2 CAT engines that are not certified to the applicable EPA NSPS 4I emission standards for non-emergency usage. Starrett should have been made aware that its proposal is **inconsistent** with NSPS 4I and not be issued a draft permit on October 9, 2019. The permit process for this project cannot proceed as proposed, we recommend that you reach out to NYSDEC to find out the next step forward for obtaining all necessary permits.

We have discussed these issues with NYSDEC and have copied NYSDEC on this message. We stand ready to be part of any conversation with Starrett and NYSDEC on how to remedy this situation and comply with the requirements. If you have any questions regarding the above, please contact Mr. Gaetano LaVigna, Chief, Stationary Source Compliance Section, Air Compliance Branch, at (212) 637-4069.

Sincerely, Suilin Chan Suilin W. Chan

Chief | Permitting Section | Air and Radiation Division | US EPA Region 2 | Office: (212) 637-4019

**From:** Richard Rao < <a href="mailto:rrao@terranext.net">rrao@terranext.net</a>>

**Sent:** Friday, May 15, 2020 3:00 PM **To:** Chan, Suilin < Chan.Suilin@epa.gov>

Subject: FW: Starrett City Title V Permit Modification - New Engines - ID# 2-6105-00263/00008

Renewal 3

Ms. Chan, See below.

From: Richard Rao < <a href="mailto:rrao@terranext.net">rrao@terranext.net</a>>
Sent: Friday, May 15, 2020 2:54 PM

To: Sullin Chan (<a href="mailto:chan.sullin@epa.gov">chan.sullin@epa.gov</a>>

**Cc:** Viorica Petriman (<a href="Petriman.viorica@epa.gov">Petriman.viorica@epa.gov</a>) <a href="Petriman.viorica@epa.gov">Petriman.viorica@epa.gov</a>); Vincent Esposito <a href="Vesposito@brooksvillecompany.com">Vesposito@brooksvillecompany.com</a>); 'Bill Foley' <a href="Polestand">brooksvillecompany.com</a>); 'Bill Foley' <a href="Polestand">brooksvillecompany.com</a>)

**Subject:** Starrett City Title V Permit Modification - New Engines - ID# 2-6105-00263/00008 Renewal

3

**Importance:** High

Ms. Chan,

Starrett City has submitted a Title V permit modification application several months ago for the installation of two new 4MW CAT engines, conversion of three 2MW old Nordberg engines to emergency generators to NYSDEC Region 2. The permit modification has been posted for 30-day public review and EPA Region 2 has provided comments in a letter dated Nov 7, 2019 to Thomas John, Section Chief, Division of Air Resources, NYSDEC Region 2. In Attachment A, item I.A.1.iv the EPA states the new engines cannot be used for non-emergency purpose even if they are equipped with air pollution controls to reduce emissions to levels equivalent to the Tier 4 standards.

Starrett has replied to this issue in a letter to NYSDEC Region 2 which is attached to this e-mail. In the interim, we have addressed other questions regarding emission factors and Part 231 analyses. I believe that the attached response has not yet been provided to the EPA.

We have very recently been notified by NYSDEC to take the matter concerning the non-emergency use of the two new CAT engines directly with your department. The attached response to NYSDEC includes a letter from the manufacture of the engines stating that they are not capable of providing a Tier 4 factory warranty; that a Tier 4 factory warranty is not available in the industry; that if they could provide a factory warranty, it would be provided with the same air pollution control technology being provided with the engines. Based upon the position of the engine manufacturer, it appears that compliance with your regulation is not possible.

Starrett City is in need of utilizing these new engines to provide necessary reliability to its power plant in the very near future. NYSDEC appears ready to issue a modified permit except for this issue. Please provide prompt attention to this matter and advise how this matter can be resolved. The applied for modification will result in decreasing facility wide air emissions.

Please confirm receipt of e-mail.

Thank you.

Richard Rao, Director
Terranext, LLC
371 Hoes Lane
Suite 200
Piscataway, NJ 08854
212-736-9191
732-377-2040
732-377-2044 fax
212-268-1512 fax
rrao@terranext.net